transforming the time series when the time series comprises only positive data values;

determining the differencing order for the time series;

constructing an initial ARIMA model for the time series by determining non-seasonal AR and MA orders; and

modifying the initial ARIMA model.

33.   The method of claim 32 wherein said imputing further comprises determining the presence of a seasonal pattern in the time series.

34.   A method for creating a multivariate ARIMA model of a time series utilizing a computer wherein separate data values, the seasonal cycle and the seasonal length for the time series are inputted into said computer comprising:

a)   inputting at least one category consisting of predictors, interventions and events represented by data values into the computer;

b)   determining the univariate ARIMA order for the time series;

c)   discarding predictors having at least one missing value;

d)   transforming the predictor if the time series in b) is transformed and said predictor comprises only positive data values;

e)   differencing said predictor, intervention and event if the times series in b) is differenced;

f)   constructing an initial ARIMA model for the time series based on the univariate ARIMA found for the time series, the intervention and event, and the remaining predictor; and

g)   modifying the initial ARIMA model.

35.   The method of claim 34 wherein said determining the univariate ARIMA model further comprises imputing at least one missing data value when any data values are missing from the time series, transforming the time series when the time series comprises only positive data values; determining the differencing order of the time series and determining the orders for AR and MA.

36. The method of claim 35 wherein said transforming the time series further comprises fitting a high order AR(p) model by the ordinary least squares method on the time series, the log of the time series and the square root of the time series.